=> d his

(FILE 'HOME' ENTERED AT 11:48:09 ON 06 JUN 2005)

FILE 'REGISTRY' ENTERED AT 11:48:19 ON 06 JUN 2005 STRUCTURE UPLOADED L133 S L1 L2 STRUCTURE UPLOADED L3

L4 16 S L3 L5 290 S L4 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:51:13 ON 06 JUN 2005 L6 23 S L5

=> d 11 L1 HAS NO ANSWERS L1

Structure attributes must be viewed using STN Express query preparation.

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y) / N: end

=> d his

(FILE 'HOME' ENTERED AT 11:48:09 ON 06 JUN 2005)

FILE 'REGISTRY' ENTERED AT 11:48:19 ON 06 JUN 2005

L1STRUCTURE UPLOADED

L233 S L1

L3 STRUCTURE UPLOADED

16 S L3 L4

290 S L4 SSS FULL L5

FILE 'CAPLUS' ENTERED AT 11:51:13 ON 06 JUN 2005 23 S L5

=> d 11

L6

L1 HAS NO ANSWERS

L1 STI

Structure attributes must be viewed using STN Express query preparation.

=> d 13 L3 HAS NO ANSWERS

.3 STR

Structure attributes must be viewed using STN Express query preparation.

```
=> d 1-23 bib abs hitstr
     ANSWER: 1 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2005:394803 CAPLUS
DN
     142:423819
TI
    Neutrophil activation by immune response modifier compounds
     Tomai, Mark A.; Vasilakos, John P.; Wightman, Paul D.
IN
     3M Innovative Properties Company, USA
PA
     U.S. Pat. Appl. Publ., 10 pp.
SO
     CODEN: USXXCO
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
     _____
    US 2005096259
                         A1
                                20050505
                                            US 2004-978850
PΙ
                                                                    20041101
     WO 2005041891
                         A2
                                20050512
                                          WO 2004-US36351
                                                                   20041101
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
            SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
            NE, SN, TD, TG
PRAI US 2003-516116P
                          Р
                                20031031
     US 2003-517805P
                          ₽
                                20031106
AB
     The invention provides a method of activating neutrophils.
                                                                 Generally, the
    method includes contacting neutrophils with a neutrophil-activating IRM
     compound and/or a TLR8-selective agonist in an amount effective to activate
     the neutrophils. In some embodiments, the method may be used to treat a
     condition treatable by activating neutrophils. In another aspect, the
     invention provides pharmaceutical compns. that generally include a
    neutrophil-activating IRM compound and/or a TLR8-selective agonist, or a
    pharmaceutically acceptable form thereof, in an amount effective to activate
     neutrophils.
TΤ
     313357-78-7 532959-63-0
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (neutrophil activation by immune response modifier compds.)
RN
     313357<del>-</del>78-7 CAPLUS
CN
    Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-
     c]quinolin-1-yl]ethyl]- (9CI) (CA INDEX NAME)
```

RN 532959-63-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:316318 CAPLUS

DN 142:392406

TI Preparation of alkoxy substituted imidazoquinolines as immunomodulators

IN Lindstrom, Kyle J.; Merrill, Bryon A.; Haraldson, Chad A.; Rice, Michael
J.; Kshirsagar, Tushar A.; Heppner, Philip D.; Wurst, Joshua R.; Niwas,
Shri; Johannessen, Sarah C.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 386 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

L'MIA	CMIT																
	PATENT NO.				KIND		DATE		APPLICATION NO.						DATE		
PI	WO 2005032484			A2 20050414		WO 2004-US32616						20041001					
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GΕ,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŬĠ,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,

EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2003-508634P P 20031003

GI

AB The title imidazoquinolines with an alkoxy substituent at the 6-, 7-, 8- or 9-position [I; R = alkyl, alkoxy, OH, etc.; n = 0-1; R1, R2 = H, non-interfering substituents; R3 = ZYR4, ZHet, etc. (Z = alkylene, alkenylene, and alkynylene optionally interrupted with one or more O groups; Y = S, SO, SO2, (un)substituted SO2NH, etc.; R4 = H, alkyl, aryl, etc.; Het = (un)substituted heterocyclyl)], useful as immunomodulators, for inducing or inhibiting cytokine biosynthesis in animals and in the treatment of diseases including viral, and neoplastic (no specific biol. data given), were prepared E.g., a multi-step synthesis of II, was given. Pharmaceutical compns. containing the compds. I are disclosed.

IT 850057-42-0P 850057-43-1P 850057-44-2P 850057-45-3P 850064-17-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of alkoxy substituted imidazoquinolines as immunomodulators) 850057-42-0 CAPLUS

RN 850057-42-0 CAPLUS
CN Methanesulfonamide, N-[[5-[[4-amino-2-(ethoxymethyl)-1-[2-methyl-2[(methylsulfonyl)amino]propyl]-1H-imidazo[4,5-c]quinolin-7yl]oxy]pentyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ \parallel & \\ N = S - NH \\ \parallel & \\ O & \\ Me - C - CH_2 \\ \parallel & \\ Me & \\ N = Me \\ \parallel & \\ N = Me$$

RN 850057-43-1 CAPLUS

CN Acetamide, N-[6-[[4-amino-2-(ethoxymethyl)-1-[2-methyl-2-[(methylsulfonyl)amino]propyl]-1H-imidazo[4,5-c]quinolin-7-yl]oxy]hexyl]-(9CI) (CA INDEX NAME)

RN 850057-44-2 CAPLUS

CN Methanesulfonamide, N-[[5-[[4-amino-1-[4-[(methylsulfonyl)amino]butyl]-2-propyl-1H-imidazo[4,5-c]quinolin-7-yl]oxy]pentyl]methyl]- (9CI) (CA INDEX NAME)

RN 850057-45-3 CAPLUS

CN Acetamide, N-[6-[[4-amino-1-[4-[(methylsulfonyl)amino]butyl]-2-propyl-1H-imidazo[4,5-c]quinolin-7-yl]oxy]hexyl]- (9CI) (CA INDEX NAME)

RN 850064-17-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-[3-(2-oxo-1-pyrrolidinyl)propoxy]-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

### IT 812631-90-6P 850069-14-6P 850069-15-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of alkoxy substituted imidazoquinolines as immunomodulators) 812631-90-6 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-7-[(6-aminohexyl)oxy]-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN

$$\begin{array}{c|c} & & & & & \\ & NH & & S-Me \\ & & & | & & \\ & & | & & \\ & CH_2-C-Me & O \\ & & | & & \\ & & Me & & \\ & & & Me \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\$$

RN 850069-14-6 CAPLUS

CN Carbamic acid, [6-[[4-amino-1-[4-[(methylsulfonyl)amino]butyl]-2-propyl-1H-imidazo[4,5-c]quinolin-7-yl]oxy]hexyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 850069-15-7 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-[(6-aminohexyl)oxy]-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

```
ANSWER 3 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
L6
AN
     2005:220136 CAPLUS
     142:273998
DN
     Treatment for CD5+ B cell lymphoma
TΙ
IN
     Miller, Richard L.; Spaner, David E.
     3M Innovative Properties Company, USA
PA
     U.S. Pat. Appl. Publ., 25 pp.
SO
     CODEN: USXXCO
DT
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO.
                          KIND
                                  DATE
                                              APPLICATION NO.
                                                                       DATE
                           ____
                                                                        20040903
PΙ
     US 2005054665
                           A1
                                  20050310
                                               US 2004-933594
                                            WO 2004-US28688
     WO 2005023190
                           A2
                                  20050317
                                                                        20040903
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
PRAI US 2003-500478P
                                  20030905
                           Р
                           Ρ
     US 2004-561440P
                                  20040412
     The present invention provides methods for increasing expression of cell
AB
     surface mols. of CD5+ B cell lymphoma cells by contacting cells with
     immune response modifiers. The invention also provides methods for the
     treatment of CD5+ B cell lymphomas, including chronic lymphocytic leukemia
     and small lymphocytic lymphoma, by administering immune response modifier
     compds. to a subject in need of such treatment. Suitable immune response
     modifier compds. include agonists of TLR7 and/or TLR8. A 5 %
     1-(2-methylpropyl)-1H-imidazo[4,5-c]quinolin-4-amine cream was applied
     once per day to a lymphomatous skin deposit associated with chronic
     lymphocytic leukemia of a 71-yr old man diagnosed with Rai Stage 0 CLL.
     The lesion disappeared after six weeks of treatment and had not recurred
     by three months after treatment ceased.
TΤ
     532959-63-0
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (immune response modifiers for increasing expression of cell surface
        mols. and treatment of CD5-pos. B cell lymphoma)
RN
     532959-63-0 CAPLUS
CN
     Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-
     yl)butyl]- (9CI) (CA INDEX NAME)
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L6

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AN
    2005:216680 CAPLUS
    142:298105
DN
ΤI
    Preparation of aryloxy and arylalkyleneoxy substituted imidazoquinolines
    as inducers of cytokine biosynthesis for treatment of viral and neoplastic
IN
    Lindstrom, Kyle J.; Martin, Hugues; Merrill, Bryon A.; Rice, Michael J.;
    Wurst, Joshua R.; Haraldson, Chad A.; Kshirsagar, Tushar; Heppner, Philip
    D.; Niwas, Shri; Griesgraber, George W.; Radmer, Matthew R.
    3M Innovative Properties Company, USA
PA
    PCT Int. Appl., 291 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LΑ
    English
FAN.CNT 1
     PATENT NO.
                       KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
                               _____
                                           -----
                                                                  _____
    WO 2005020999
                         A1
                               20050310
                                           WO 2004-US28021
                                                                  20040827
PΙ
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            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
            SN, TD, TG
PRAI US 2003-498270P
                         Ρ
                               20030827
```

ANSWER 4 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

20040618

Ρ

AB Title compds. [I; R3 = (un)substituted alk(en/yn)ylene-hetero/aryl, alk(en/yn)ylene-hetero/arylene-SO-R4, alk(en/yn)ylene-hetero/arylene-alkylene-SO-R4, etc.; R4 = H, (un)substituted alk(en/yn)yl, hetero/aryl,

OS

GI

US 2004-581254P

MARPAT 142:298105

heterocyclyl, etc.; R = alkyl, OH and derivs., halo, CF3; R', R'' = independently H, non-interfering substituent; n = 0-1; and their pharmaceutically acceptable salts], were prepared as immunomodulators for inducing cytokine biosynthesis in animals and in the treatment of diseases including viral and neoplastic diseases. For example, II was prepared via cyclocondensation 7-Benzyloxy-N'-(2-methylpropyl)quinoline-3,4-diamine (preparation given) with tri-Me orthobutyrate, followed by oxidation and amination. Thus, I induced interferon and tumor necrosis factor in human cells (no data).

847575-05-7P, N-[2-[4-Amino-2-(ethoxymethyl)-7-hydroxy-1Himidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide
847575-61-5P, N-[4-(4-Amino-7-benzyloxy-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]methanesulfonamide 847576-00-5P,
N-[2-[4-Amino-8-benzyloxy-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]1,1-dimethylethyl]methanesulfonamide 847577-50-8P,
N-[2-[4-Amino-7-(benzyloxy)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (immunomodulator; preparation of aryloxy and arylalkyleneoxy imidazoquinolines as inducers of cytokine biosynthesis for treatment of

RN 847575-05-7 CAPLUS

CN

viral and neoplastic disease).

Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-hydroxy-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 847575-61-5 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-ethyl-7-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 847576-00-5 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-8-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 847577-50-8 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

IT **847575-03-5P**, N-[4-[4-Amino-7-benzyloxy-2-(2-methoxyethyl)-1Himidazo[4,5-c]quinolin-1-yl]butyl]methanesulfonamide 847575-34-2P , N-[4-[4-Amino-8-(benzyloxy)-2-butyl-1H-imidazo[4,5-c]quinolin-1yl]butyl]methanesulfonamide 847575-41-1P, N-[4-[4-Amino-8-(benzyloxy)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1yl]butyl]methanesulfonamide 847575-43-3P, N-[4-[4-Amino-8-(benzyloxy) -2-methyl-1H-imidazo[4,5-c]quinolin-1yl]butyl]methanesulfonamide 847575-44-4P, N-[4-[4-Amino-8-(benzyloxy) -2-ethyl-1H-imidazo[4,5-c]quinolin-1yl]butyl]methanesulfonamide 847575-49-9P, N-[4-(4-Amino-2-butyl-8-hydroxy-1H-imidazo[4,5-c]quinolin-1-yl)butyl]methanesulfonamide **847575-58-0P**, N-[4-(4-Amino-2-ethyl-8-hydroxy-1H-imidazo[4,5c]quinolin-1-yl)butyl]methanesulfonamide 847575-62-6P, N-[4-(4-Amino-2-ethyl-7-hydroxy-1H-imidazo[4,5-c]quinolin-1yl)butyl]methanesulfonamide 847575-79-5P, N-[2-[4-Amino-2-(ethoxymethyl)-7-(3-methoxybenzyloxy)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1dimethylethyl]methanesulfonamide 847575-80-8P, N-[2-[4-Amino-7-(2-chlorobenzyloxy)-2-(ethoxymethyl)-1H-imidazo[4,5c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide 847575-81-9P , N-[2-[4-Amino-2-(ethoxymethyl)-7-(4-fluorobenzyloxy)-1H-imidazo[4,5c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide 847575-82-0P , N-[2-[4-Amino-2-(ethoxymethyl)-7-(3-methylbenzyloxy)-1H-imidazo[4,5c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide 847575-83-1P , N-[2-[4-Amino-7-[(benzothiazol-2-yl)methoxy]-2-(ethoxymethyl)-1Himidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide 847575-84-2P, N-[2-[4-Amino-2-(ethoxymethyl)-7-(5trifluoromethylfuran-2-ylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1dimethylethyl]methanesulfonamide 847575-85-3P, Ethyl 5-[[[4-Amino-2-(ethoxymethyl)-1-[2-[(methylsulfonyl)amino]-2-methylpropyl]-1H-imidazo[4,5-c]quinolin-7-yl]oxy]methyl]furan-2-carboxylate 847576-01-6P, N-[2-[4-Amino-2-(ethoxymethyl)-8-hydroxy-1Himidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide 847577-07-5P 847577-09-7P 847577-13-3P 847577-15-5P 847577-23-5P 847577-51-9P, N-[2-[4-Amino-2-(ethoxymethy1)-7-[3-(thien-2-y1)propoxy]-1H-imidazo[4,5c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(immunomodulator; preparation of aryloxy and arylalkyleneoxy imidazoquinolines as inducers of cytokine biosynthesis for treatment of viral and neoplastic disease)

RN 847575-03-5 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-7-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

MeO-CH<sub>2</sub>-CH<sub>2</sub>

$$N$$
 $N$ 
 $N$ 
 $N$ 
 $N$ 

RN 847575-34-2 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-butyl-8-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 847575-41-1 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-8-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 847575-43-3 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-methyl-8-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 847575-44-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-ethyl-8-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 847575-49-9 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-8-hydroxy-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 847575-58-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-8-hydroxy-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 847575-62-6 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-7-hydroxy-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 847575-79-5 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-[(3-methoxyphenyl)methoxy]-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]-(9CI) (CA INDEX NAME)

RN 847575-80-8 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-7-[(2-chlorophenyl)methoxy]-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 847575-81-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-[(4-fluorophenyl)methoxy]-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]-(9CI) (CA INDEX NAME)

RN 847575-82-0 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-[(3-methylphenyl)methoxy]-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]-(9CI) (CA INDEX NAME)

RN 847575-83-1 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-7-(2-benzothiazolylmethoxy)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]-(9CI) (CA INDEX NAME)

RN 847575-84-2 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-[[5-(trifluoromethyl)-2-furanyl]methoxy]-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl](9CI) (CA INDEX NAME)

RN 847575-85-3 CAPLUS

CN 2-Furancarboxylic acid, 5-[[[4-amino-2-(ethoxymethyl)-1-[2-methyl-2-[(methylsulfonyl)amino]propyl]-1H-imidazo[4,5-c]quinolin-7-yl]oxy]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 847576-01-6 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-8-hydroxy-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 847577-07-5 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-[[[(methylamino)carbonyl]amino]methyl]-7-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 847577-06-4 CMF C23 H27 N7 O4 S

$$\begin{array}{c|c}
Me \\
O & S & O \\
NH - CH_2 - CH_2 \\
MeNH - C - NH - CH_2 & N \\
N & NH_2
\end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

847577-09-7 CAPLUS

CN Ethanesulfonamide, N-[2-[4-amino-2-[[[(methylamino)carbonyl]amino]methyl]-7-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 847577-08-6 CMF C24 H29 N7 O4 S

$$\begin{array}{c|c}
 & \text{Et} & \\
 & \text{O} & \text{S} = \text{O} \\
 & \text{O} & \text{NH-CH}_2 - \text{CH}_2 \\
 & \text{MeNH-C-NH-CH}_2 & \text{N} \\
 & \text{N} & \text{NH}_2
\end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 847577-13-3 CAPLUS

CN 1-Butanesulfonamide, N-[2-[4-amino-2-[[[(methylamino)carbonyl]amino]methyl]-7-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 847577-12-2 CMF C26 H33 N7 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 847577-15-5 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-[[[(methylamino)carbonyl]amino]methyl]-

7-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]-1,1,1-trifluoro-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 847577-14-4

CMF C23 H24 F3 N7 O4 S

$$\begin{array}{c|c}
 & CF_3 \\
 & O & S = 0 \\
 & O & NH - CH_2 - CH_2 \\
 & MeNH - C - NH - CH_2 \\
 & N & NH_2
\end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 847577-23-5 CAPLUS

CN Benzenemethanesulfonamide, N-[2-[4-amino-2-[[[(methylamino)carbonyl]amino]methyl]-7-(phenylmethoxy)-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 847577-22-4

CMF C29 H31 N7 O4 S

$$Ph-CH_2$$
 $O=S=0$ 
 $O=NH-CH_2-CH_2$ 
 $MeNH-C-NH-CH_2$ 
 $N=NH_2$ 
 $N=NH_2$ 

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 847577-51-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-[3-(2-thienyl)propoxy]-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

IT 847578-88-5p, N-[2-[4-Amino-2-(ethoxymethyl)-7-(prop-2-ynyloxy)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide 847578-89-6p, <math>N-[2-[4-Amino-2-(ethoxymethyl)-7-[[3-(thien-2-1)]-1]

CN

yl)prop-2-ynyl]oxy]-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-

dimethylethyl]methanesulfonamide

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of aryloxy and arylalkyleneoxy imidazoquinolines as inducers of cytokine biosynthesis for treatment of viral and neoplastic disease)

RN 847578-88-5 CAPLUS

Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-(2-propynyloxy)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 847578-89-6 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-[[3-(2-thienyl)-2-propynyl]oxy]-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 5 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
     2005:216676 CAPLUS
AN
     142:291342
DN
ΤI
     Methods related to the treatment of mucosal associated conditions
     Miller, Richard L.; Ma, David Q.
IN
     3M Innovative Properties Company, USA
PΑ
     PCT Int. Appl., 40 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                            KIND
                                    DATE
                                                  APPLICATION NO.
                                                                            DATE
                                                                            20040901
     WO 2005020995
                                    20050310
                                                  WO 2004-US28407
ΡI
                            A1
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
              NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
              TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
PRAI US 2003-499607P
                                    20030902
                             Ρ
     Using interrupted delivery of Immune Responce Modifiers (IRMs) by
      intermittently applying an IRM to a mucosal surface it is possible to
      achieve therapeutic levels and durations of cytokine induction, while
      substantially reducing irritation side effects.
TΤ
     313357-84-5
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (methods for treatment of mucosal associated conditions)
RN
     313357-84-5 CAPLUS
CN
     Methanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-
     c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)
```

$$\begin{array}{c} O \\ \parallel \\ Me-S-NH-(CH_2)_4 \\ \parallel \\ O \\ MeO-CH_2-CH_2 \\ N \\ NH_2 \end{array}$$

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L6
     ANSWER 6 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2005:160991 CAPLUS
DN
     142:246181
TΙ
     Formulations containing an amine-based immune response modifier
     Hammerbeck, David M.; Guy, Cynthia A.; Leung, Suzanne S.
IN
     3M Innovative Properties Company, USA
PA
SO
     PCT Int. Appl., 118 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 2
     PATENT NO.
                         KIND
                                DATE
                                             APPLICATION NO.
                                                                     DATE
    WO 2005016275
                          A2
                                 20050224
                                             WO 2004-US25277
                                                                     20040805
PΤ
                          Α3
                                 20050414
     WO 2005016275
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
                                20050331
                                             US 2004-911800
                                                                     20040805
     US 2005070460
                          A1
PRAI US 2003-493109P
                          Р
                                 20030805
     Pharmaceutical formulations in an aqueous (preferably, sprayable) formulation
     including an immune response modifier (IRM), such as those chosen from
     imidazoquinoline amines, tetrahydroimidazoquinoline amines,
     imidazopyridine amines, 6,7-fused cycloalkylimidazopyridine amines,
     1,2-bridged imidazoguinoline amines, imidazonaphthyridine amines,
     imidazotetrahydronaphthyridine amines, oxazoloquinoline amines,
     thiazoloquinoline amines, oxazolopyridine amines, thiazolopyridine amines,
     oxazolonaphthyridine amines, thiazolonaphthyridine amines, and 1H-imidazo
     dimers fused to pyridine amines, quinoline amines, tetrahydroquinoline
     amines, naphthyridine amines, or tetrahydronaphthyridine amines, are
               In one embodiment, the aqueous formulations are advantageous for
     treatment and/or prevention of allergic rhinitis, viral infections,
     sinusitis, and asthma. For example, N-[2-[4-amino-2-(ethoxymethyl)-1H-
     imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]methanesulfonamide (IRM 1)
     was prepared as a 0.375% aqueous solution capable of being nasally
administered via
     a spray pump.
                    The solution contained IRM 1 0.375%, CM-cellulose sodium 0.1%,
     benzalkonium chloride 0.02%, disodium EDTA 0.1%, L-lactic acid 1.53%, PEG
     400 15%, 1N NaOH as needed for pH 4.0, and water to 100%. The IRM 1 solution
     (50 μL) administered to rats once 4 h before infection with humanized,
     non-lethal influenza virus, almost completely suppressed the virus. titer.
IT
     313356-36-4 532959-63-0 642473-39-0
     642473-59-4 642473-62-9 642473-65-2
     740809-55-6 740809-59-0 845638-55-3
     845638-56-4 845638-57-5 845638-61-1
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (solns. containing amine-based immunomodulators)
RN
     313356-36-4 CAPLUS
CN
     Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-
```

yl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{Me-S-NH-CH}_2\text{-CH}_2 \\ \parallel \\ \text{O} \quad \text{n-Bu} \\ \parallel \\ \text{N-NH}_2 \end{array}$$

RN 532959-63-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-39-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-59-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(3-phenoxypropyl)-1H-imidazo[4,5-

c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 642473-62-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 642473-65-2 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(cyclopropylmethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 740809-55-6 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 740809-59-0 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 845638-55-3 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 845638-56-4 CAPLUS

CN Methanesulfonamide, N-[[5-[[4-amino-2-(ethoxymethyl)-1-[2-methyl-2-[(methylsulfonyl)amino]propyl]-1H-imidazo[4,5-c]quinolin-6-yl]oxy]pentyl]methyl]- (9CI) (CA INDEX NAME)

RN 845638-57-5 CAPLUS

CN Acetamide, N-[6-[[4-amino-2-(ethoxymethyl)-1-[2-[(methylsulfonyl)amino]propyl]-lH-imidazo[4,5-c]quinolin-6-yl]oxy]hexyl]-(9CI) (CA INDEX NAME)

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RN845638-61-1 CAPLUS

Methanesulfonamide, N-[3-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)-CN 2,2-dimethylpropyl]- (9CI) (CA INDEX NAME)

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2005:158509 CAPLUS
ΑN
DN
     142:233285
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ANSWER 7 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

ΤI Infection prophylaxis using immune response modifier compounds

Hammerbeck, David M.; Guy, Cynthia A. IN

3M Innovative Properties Company, USA PA

SO PCT Int. Appl., 28 pp. CODEN: PIXXD2

DTPatent

LA English

L6

CAN.	CNI	2																
	PATENT NO.					KIND DATE			APPLICATION NO.					DATE				
ΡI	WO 2005016273					A2 20050224			WO 2004-US25241					20040805				
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM;	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚŻ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	ΝI,
			NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2005070460 A1 20050331 US 2004-911800 PRAI US 2003-493109P P 20030805

AB The present invention provides methods of providing prophylaxis to a subject against an infectious agent. In general, the methods include topically administering to the respiratory tract of a subject an immune response modifier (IRM) compound in an amount effective to reduce infection by the agent. Rats treated with IRM compound, N-{2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl}methanesulfonamide, four hours before or twenty-four hours before and four hours before intranasal infection with humanized, nonlethal influenza virus showed reduced viral titers in nasal lavage fluid and whole lung homogenates.

IT 642473-62-9

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (infection prophylaxis using immune response modifier compds.)

RN 642473-62-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:29289 CAPLUS

DN 142:134599

TI Preparation of sulfonamide substituted imidazoquinolines as immunomodulators

IN Griesgraber, George W.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

20040805

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ΡI
                                20050113
     WO 2005003065
                          A2
                                            WO 2004-US20607
                                                                    20040625
     WO 2005003065
                          Α3
                                20050310
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRAI US 2003-483200P
                                20030627
     MARPAT 142:134599
os
GΙ
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AΒ The title imidazoquinoline and tetrahydroimidazoquinoline compds. I [R1 = alkyl-NR3-SO2-X-R4, alkenyl-NR3-SO2-X-R4, alkyl-NR6-SO2-R7; X = a bond, NR5; R4 = (un)substituted aryl, heteroaryl, heterocyclyl, alkyl, alkenyl; R2 = H, alkyl, alkenyl, aryl, etc.; R3 = H, alkyl; R5 = H, alkyl; or R4 and R5 can combine to form (un) substituted 3-7 membered heterocyclic ring; R6 = H, alkyl; R7 = H, alkyl; R6 and R7 combine to form (un) substituted heterocyclic ring; n = 0-4; R = alkyl, alkoxy, halo, CF3] that contain sulfonamide functionality at the 1-position are useful as immune response modifiers. Thus, reacting 1-(3-aminopropyl)-2-(ethoxymethyl)-1Himidazo[4,5-c]quinolin-4-amine with methanesulfonic anhydride in the presence of Et3N in MeCN afforded II. The title compds. I were tested for interferon  $\alpha$  and TNF $\alpha$  induction in human cells (data given for over 30 compds.). The compds. and compns. of the invention can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

IT 313356-36-4P 532959-63-0P 534568-90-6P 642473-39-0P 642473-41-4P 642473-42-5P 642473-44-7P 642473-49-2P 642473-53-8P 642473-54-9P 642473-56-1P 642473-57-2P 642473-58-3P 642473-65-2P 823809-06-9P 823809-07-0P 823809-08-1P 823809-12-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonamide substituted imidazoquinolines as immunomodulators)

RN 313356-36-4 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{Me-S-NH-CH}_2\text{-CH}_2 \\ \parallel \\ \text{O} \quad \text{n-Bu} \\ \parallel \\ \text{N} \\ \end{array}$$

RN 532959-63-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 534568-90-6 CAPLUS

CN Methanesulfonamide, N-[3-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)propyl]- (9CI) (CA INDEX NAME)

RN 642473-39-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-41-4 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-42-5 CAPLUS

CN Methanesulfonamide, N-[3-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)propyl]- (9CI) (CA INDEX NAME)

RN 642473-44-7 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-hexyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-49-2 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-pentyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-53-8 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-54-9 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-2,2-dimethylpropyl]- (9CI) (CA INDEX NAME)

RN 642473-56-1 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-57-2 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(ethoxymethyl)-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-58-3 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(3-phenoxypropyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-59-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(3-phenoxypropyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 642473-62-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ NH & & & \\ S-Me \\ \\ CH_2-C-Me & O \\ \\ & & \\ Me \\ \\ & & \\ Me \\ \\ & & \\ NH_2 \\ \end{array}$$

RN 642473-63-0 CAPLUS

CN Ethanesulfonamide, N-[4-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-65-2 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(cyclopropylmethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 823809-06-9 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-S-NH-(CH_2)3} \\ \text{MeO-CH_2-CH_2} \\ \text{N} \end{array}$$

RN 823809-07-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-2-pentyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 823809-08-1 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 823809-12-7 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:29288 CAPLUS

DN 142:114068

 ${\tt TI}$  Preparation of sulfonamide substituted imidazoquinolines as immunomodulators

IN Lindstrom, Kyle J.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 58 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT	NO.			KIN	D	DATE		i	APPL:	ICAT:	ION I	NO.		D	ATE	
PI	WO 2005		-		A2 A3		2005 2005		7	WO 2	004-1	JS20	606			0040	
	W:	AE, CN,															
		GE, LK,	•	•	•	•	•		•	•	•	•	•			•	•
		NO, I	-	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	RW:	BW, AZ,	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
		SI,	SK,	TR,	•	•	GR, CF,	•	•	•	•	•	•	•	•	•	•
	US 2003		00P		P		2003	0627									
. OS - GI	MARPAT	142:1	1406	00													

ΆB The title 1-imidazoguinoline and tetrahydroimidazoguinoline compds. I [R1 = alkyl-NR3-SO2-X-R4, alkenyl-NR3-SO2-X-R4, alkyl-NR6-SO2-R7; X = a bond, NR5; R4 = (un)substituted aryl, heteroaryl, heterocyclyl, alkyl, alkenyl; R2 = H, alkyl, alkenyl, aryl, etc.; R3 = H, alkyl; R5 = H, alkyl; or R4 and R5 can combine to form (un) substituted 3-7 membered heterocyclic ring; R6 = H, alkyl; R7 = H, alkyl; R6 and R7 combine to form (un)substituted heterocyclic ring; n = 0-4; R = alkyl, alkoxy, halo, CF3] that contain sulfonamide functionality at the 1-position are useful as immune response modifiers. E.g., a multi-step synthesis of II, starting from tert-Bu 4-(2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butylcarbamate, was given. title compds. I were tested for interferon  $\alpha$  and  $\text{TNF}\alpha$ induction in human cells (data given for over 30 compds.). The compds. and compns. of the invention can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

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IT 313356-36-4P 532959-63-0P 534568-90-6P 642473-39-0P 642473-41-4P 642473-42-5P 642473-44-7P 642473-49-2P 642473-53-8P 642473-54-9P 642473-56-1P 642473-57-2P 642473-58-3P 642473-59-4P 642473-62-9P 642473-63-0P 642473-65-2P 823809-06-9P 823809-07-0P 823809-08-1P 823809-12-7P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
```

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonamide substituted imidazoquinolines as immunomodulators)

RN 313356-36-4 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{Me-}S-\text{NH-}CH_2-\text{CH}_2 \\ \parallel \\ \text{O} \\ \text{n-Bu} \\ \parallel \\ \text{N} \\ \text{NH}_2 \\ \end{array}$$

RN 532959-63-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 534568-90-6 CAPLUS

CN Methanesulfonamide, N-[3-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)propyl]- (9CI) (CA INDEX NAME)

RN 642473-39-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-41-4 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-42-5 CAPLUS

CN Methanesulfonamide, N-[3-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)propyl]- (9CI) (CA INDEX NAME)

RN 642473-44-7 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-hexyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-49-2 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-pentyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O & \\
 & || & \\
 & || & \\
 & O & \\
 & Me - (CH_2)_4 \\
 & O & \\
 & Me - (CH_2)_4 \\
 & N & \\
 & N & \\
 & NH_2 & \\
 &$$

RN 642473-53-8 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-54-9 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-2,2-dimethylpropyl]- (9CI) (CA INDEX NAME)

RN 642473-56-1 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O \\ Me-S-NH-(CH_2)_3 \\ \parallel \\ O \\ MeO-CH_2-CH_2 \\ N \\ NH_2 \end{array}$$

RN 642473-57-2 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(ethoxymethyl)-6,7,8,9-tetrahydro-1H-

imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-58-3 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(3-phenoxypropyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-59-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(3-phenoxypropyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 642473-62-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 642473-63-0 CAPLUS

CN Ethanesulfonamide, N-[4-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-65-2 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(cyclopropylmethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 823809-06-9 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 823809-07-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-2-pentyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ Me - S - NH - (CH_2) 4 \\ \parallel \\ O \\ Me - (CH_2) 4 \\ \parallel \\ N \\ N \\ NH_2 \end{array}$$

RN 823809-08-1 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, monohydrochloride (9CI) (CA INDEX

NAME)

$$\begin{array}{c|c} O & \\ \parallel & \\ NH- (CH_2)_4 \\ \parallel & \\ O & \\ Me & \\ N & \\ NH_2 \end{array}$$

● HCl

RN 823809-12-7 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:1126841 CAPLUS

DN 142:79920

TI Delivery of immune response modifier compounds

IN Wightman, Paul D.; Zarraga, Isidro Angelo E.; Jing, Naiyong; Liu, Jie J.

PA USA

SO U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S. Ser. No. 640,904. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	US 2004258698	A1	20041223	US 2004-821335	20040409		
	US 2004091491	A1	20040513	US 2003-640904	20030814		
	WO 2004091500	A2	20041028	WO 2004-US11062	20040409		

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AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
               CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
               LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
               NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
               TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
               BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
               ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
               SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
               TD, TG
     WO 2004108072
                                     20041216
                                                   WO 2004-US11081
                              A2
                                                                              20040409
               AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
          W:
               CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
               GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
               LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
               NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
               TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
               SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
               TD, TG
PRAI US 2003-462140P
                                     20030410
                              Ρ
     US 2003-640904
                              A2
                                     20030814
     US 2003-515256P
                              Ρ
                                     20031029
     US 2004-545424P
                              Р
                                     20040218
     US 2004-545542P
                              Ρ
                                     20040218
     US 2002-403846P
                              Ρ
                                     20020815
GΙ
```

AB The present invention provides immune response modifiers (IRMs) associated with (typically, attached to, and preferably, covalently attached to) macromol. support materials. The IRM compds. in such IRM-support complexes retain biol. activity. Such attachment of an IRM to a macromol. support material provides for the localized biol. activity of the IRM. The IRM I was prepared and IRMs were linked to such carriers as avidin beads, gold particles, silica nanoparticles, and polymers.

IT 812631-90-6P 812631-99-5P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(delivery of immune response modifier compds.)

RN 812631-90-6 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-7-[(6-aminohexyl)oxy]-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 812631-99-5 CAPLUS

CN Carbamic acid, [6-[[4-amino-2-(ethoxymethyl)-1-[2-methyl-2-[(methylsulfonyl)amino]propyl]-1H-imidazo[4,5-c]quinolin-7-yl]oxy]hexyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L6 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:905622 CAPLUS

DN 141:374755

TI Compositions and methods for induction of opioid receptors, and therapeutic use

IN Birmachu, Woubalem M. R.; Slade, Herbert B.; Stolpa, John C.; Urosevic, Mirjana PA 3M Innovative Properties Company, USA

SO U.S. Pat. Appl. Publ., 16 pp.

CODEN: USXXCO

DT Patent LA English

FAN.CNT 1

	PATENT NO.					KIN	D	DATE		APPLICATION NO.						DATE			
ΡI	US	2004214851				A1		20041028		1	US 2004-832737					2	0040	427	
	WO	2004	0961	44		A2		20041111			WO 2004-US12897					20040427			
		W:	ΑE,	ΑG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GΕ,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
			NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	
			SN,	TD,	TG														

PRAI US 2003-466227P P 20030428

AB The invention provides compns. and method for increasing expression of opioid receptors. Generally, the compns. include an opioid receptor-inducing compound (e.g. an imidazoquinoline amine compound) and, optionally, an opioid receptor ligand. Generally, the methods include contacting a cell with an amount of an opioid receptor-inducing compound effective for inducing expression of the opioid receptor and, optionally, contacting the cell with an opioid receptor ligand. The methods of the invention may be used e.g. to reduce the effects of tissue damage.

IT 313355-91-8

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(compns. and methods for induction of opioid receptors, and therapeutic use)

RN 313355-91-8 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

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2004:802451 CAPLUS
AN
DN
     141:289086
ΤI
     Selective activation of cellular activities mediated through a common
     TOLL-like receptor
IN
     Fink, Jason R.; Gupta, Shalley K.
     3M Innovative Properties Company, USA
PA
SO
     U.S. Pat. Appl. Publ., 14 pp.
     CODEN: USXXCO
DΤ
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                           KIND
                                  DATE
                                                APPLICATION NO.
                                                                         DATE
                           ____
                                   _____
     US 2004191833
                                   20040930
PΙ
                            Α1
                                                US 2004-807934
                                                                         20040324
     WO 2004087049
                            A2
                                   20041014
                                                WO 2004-US8979
                                                                         20040324
     WO 2004087049
                            АЗ
                                   20041229
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
         TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
              ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
              SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
              TD, TG
PRAI US 2003-457336P
                                   20030325
                            Р
     Methods of identifying compds. that selectively modulate cellular
     activities mediated by a common TLR are provided. Generally, the methods
     include providing an assay to detect modulation of a first cellular
     activity mediated by a TLR; providing an assay to detect modulation of a
     second cellular activity mediated by the TLR; performing each assay using
     a test compound; and identifying the test compound as a compound that
     selectively modulates at least one cellular activity of a plurality of
     activities mediated by a common TLR if the test compound modulates the first
     cellular activity to a different extent than it modulates the second
     TLR-mediated cellular activity. Compds. identified by such methods,
     pharmaceutical compns. including such compds., and methods of treating a
     condition by administering such pharmaceutical compns. to a subject are
     also provided.
IT
     642473-49-2 750595-95-0
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (selective activation of cellular activities mediated through common
        TOLL-like receptor)
     642473-49-2 CAPLUS
RN
     Methanesulfonamide, N-[4-(4-amino-2-pentyl-1H-imidazo[4,5-c]quinolin-1-
CN
```

yl)butyl]- (9CI) (CA INDEX NAME)

RN 750595-95-0 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{Me-S-NH-CH}_2 \\ \text{O} \\ \text{Me-C-Me} \\ \text{MeO-CH}_2 - \text{CH}_2 \\ \text{N} \\ \text{NH}_2 \end{array}$$

L6 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:722830 CAPLUS

DN 141:236623

TI Selective modulation of TLR-mediated biological activity

IN Fink, Jason R.; Gorden, Keith B.; Gorski, Kevin S.; Gupta, Shalley K.; Qiu, Xiaohong; Vasilakos, John P.

PA 3M Innovative Properties Company, USA

SO U.S. Pat. Appl. Publ., 22 pp. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PAT	CENT 1	NO.			KIN	D	DATE			APPL	ICAT:	ION	NO.		D/	ATE	
							-											
ΡI	US	2004	17108	36		A1		2004	0902	1	US 2	004-	7887	31		20	00402	227
	WO	2004	07586	65		A2		2004	0910	1	WO 2	004-1	JS61	15		20	00402	227
	WO	2004	0758	65		A3		2004	1118									
		W:	ΑE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	ΑT,	ΑT,	ΑU,	ΑZ,	ΑZ,	BA,	BB,	BG,
			BG,	BR,	BR,	BW,	BY,	BY,	BZ,	BZ,	CA,	CH,	CN,	CN,	CO,	CO,	CR,	CR,
			CU,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EC,	EE,	EE,	EG,	ES,
			ES,	FI,	FI,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	HU,	HU,	ID,	IL,	IN,

IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2003-450484P

P 20030227

AB Methods of identifying a compound that selectively modulates at least one TLR-mediated cellular activity are disclosed. Generally, the methods include identifying a compound as a compound that selectively modulates at least one TLR-mediated cellular activity if the compound modulates one TLR-mediated cellular activity to a different extent than it modulates a second TLR-mediated cellular activity. Compds. so identified and pharmaceutical compns. including such compds. are also disclosed. Methods of selectively modulating immune cells and methods of treating certain conditions are also provided. Such methods include administering to cells or a subject a compound that selectively modulates a TLR-mediated cellular activity.

IT 313356-02-4 532959-63-0 750595-95-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(selective modulation of TLR-mediated biol. activity)

RN 313356-02-4 CAPLUS

CN 1-Propanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
O \\
| \\
N - Pr - S - NH - CH_2 - CH_2 \\
O \quad n - Bu \quad N \\
N \quad NH_2
\end{array}$$

RN 532959-63-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 750595-95-0 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-2-methylpropyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{Me-S-NH-CH}_2 \\ \text{II} \\ \text{O} \\ \text{Me-C-Me} \\ \text{MeO-CH}_2\text{-CH}_2 \\ \text{N} \\ \text{N} \\ \text{NH}_2 \end{array}$$

L6 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:681403 CAPLUS

DN 141:185096

TI Methods and compositions related to IRM compounds and toll-like receptor 8

IN Gorden, Keith B.; Qiu, Xiaohong; Vasilakos, John P.

PA 3M Innovative Properties Company, USA

SO U.S. Pat. Appl. Publ., 25 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PA	rent	NO.			KIN	0	DATE			APPL	ICAT	ION	NO.		D	ATE	
							-											
ΡI	US	2004	1623	09		A1		2004	0819		US 2	004-	7773	10		2	0040	212
	WO	2004	0714	59		A2		2004	0826	,	WO 2	004-1	US43.	53		2	0040	212
	WO	2004	0714	59		<b>A</b> 3		2005	0127									
		W:	ΑE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	ΑT,	ΑT,	AU,	ΑZ,	ΑZ,	ΒA,	BB,	BG,
			BG,	BR,	BR,	BW,	BY,	BY,	ΒZ,	ΒZ,	CA,	CH,	CN,	CN,	co,	CO,	CR,	CR,
			CU,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EC,	EE,	EE,	EG,	ES,
			ES,	FI,	FI,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	HU,	HU,	ID,	IL,	IN,
			IS,	JP,	JP,	ΚE,	ΚE,	KG,	KG,	KP,	KP,	ΚP,	KR,	KR,	ΚZ,	ΚZ,	KZ,	LC,
			LK,	LR,	LS,	LS,	LT,	LU,	LV,	MA,	MD,	MD,	MG,	MK,	MN,	MW,	MX,	MX,

MZ, MZ, NA, NI

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2003-447179P

P 20030213

AB Methods of eliciting a toll-like receptor 8 (TLR8)-mediated cellular response are disclosed. Such methods include administration of either a TLR8 agonist or a TLR8 antagonist to an IRM (immune response modifier)-responsive cell so that the IRM compound affects at least one TLR8-mediate cellular signaling pathway. In some cases, the method may provide prophylactic or therapeutic treatment for a condition treatable by modulating a TLR8-mediated cellular pathway.

IT 313356-02-4 313356-36-4 532959-63-0 642473-42-5 642473-62-9 740809-55-6 740809-56-7 740809-58-9 740809-59-0 740809-60-3 740809-61-4

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(methods and compns. related to immune response modifier compds. and affecting toll-like receptor 8-mediated cellular response for therapeutic treatments)

RN 313356-02-4 CAPLUS

CN 1-Propanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 313356-36-4 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 532959-63-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-42-5 CAPLUS

CN Methanesulfonamide, N-[3-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)propyl]- (9CI) (CA INDEX NAME)

RN 642473-62-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ NH & & & \\ S-Me \\ \hline \\ CH_2-C-Me & O \\ \hline \\ Me \\ \hline \\ Me \\ \\ Me \\ \\ NH_2 \\ \end{array}$$

RN 740809-55-6 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 740809-56-7 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 740809-58-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(2-methoxyethyl)-lH-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ NH & & & \\ S-Me \\ \\ CH_2-C-Me & O \\ \\ Me \\ \\ Me \\ \\ \\ Me \\ \\ \\ \\ N \\ \\ \\ \\ NH_2 \\ \end{array}$$

RN 740809-59-0 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 740809-60-3 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 740809-61-4 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-ethyl-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

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L6
     ANSWER 15 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
AN
     2004:589386 CAPLUS
DN
     141:139130
     Vaccines comprising TLR agonist, TNF/TNF receptor agonist and antigen for
ΤI
     inducing cellular immune response against infection or tumor
     Noelle, Randolph J.; Ahonen, Cory L.; Kedl, Ross M.
IN
     3M Innovative Properties Company, USA
PA
SO
     PCT Int. Appl., 48 pp.
     CODEN: PIXXD2
DТ
     Patent
LΑ
     English
FAN.CNT 1
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
     PATENT NO.
                         KIND
                                             ______
                                 -----
                         ____
                                             WO 2003-US41796
                                                                     20031230
     WO 2004060319
                          A2
                                 20040722
PΙ
                                 20041104
     WO 2004060319
                         A3
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
             NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                 20040722
                                             US 2003-748010
                                                                     20031230
     US 2004141950
                          A1
                        P
PRAI US 2002-437398P
                                 20021230
     The present invention provides immunostimulatory combinations. Generally,
     the immunostimulatory combinations include a TLR agonist, a TNF or TNF
     receptor agonist and an tumor antigen or viral, bacterial or parasitic
     antigen. The TLR agonist is an agonist of TLR1-10 e.g. IRM compound,
     MALP-2, LPS, polyIC, CpG or any combination. The TNF agonist is an
     agonist or antibody against CD40L, OX40 ligand, 4-1BB ligand, CD27, CD30 ligand, TNF-\alpha, TNF-\beta, RANK ligand, LT-\alpha, LT-\beta, GITR
     ligand or LIGHT. The TNF receptor agonist is an antibody or agonist of
     CD40, OX40, 4-1BB, CD27 ligand, CD30, TNFR2, RANK, LT-\alphaR,
     LT-\betaR, HVEM, GITR, TROY or RELT. These immunostimulatory
     combinations are useful for inducing Th1 immune response or
     antigen-specific CD8+ effector and memory T cell response against
     infectious and neoplastic conditions.
ΙT
     532959-63-0 642473-39-0
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (vaccines comprising TLR agonist, TNF/TNFR agonist and antigen for
        inducing cellular immune response against infection or tumor)
RN
     532959-63-0 CAPLUS
     Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-
CN
     yl)butyl]- (9CI) (CA INDEX NAME)
```

RN 642473-39-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:566606 CAPLUS

DN 141:123628

TI Preparation of aryl/heteroaryl substituted imidazoquinolines as immunomodulators

IN Hays, David S.; Niwas, Shri; Kshirsagar, Tushar; Ghosh, Tarun K.; Gupta, Shalley K.; Heppner, Philip D.; Merrill, Bryon A.; Bonk, Jason D.; Danielson, Michael E.; Gerster, John F.; Haraldson, Chad A.; Johannessen, Sarah C.; Kavanagh, Maureen A.; Lindstrom, Kyle J.; Prince, Ryan B.; Radmer, Matthew R.; Rice, Michael J.; Squire, David J.; Strong, Sarah A.; Wurst, Joshua R.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 465 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
					<del>-</del>			
PΙ	WO 2004058759	A1	20040715	WO 2003-US40373	20031218			
	WO 2004058759	C1	20050317					
	W: AE, AG, AL	, AM, AT	', AU, AZ, BA	A. BB. BG. BR. BW. BY.	BZ, CA, CH,			

```
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
              GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
              LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
              NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
              TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
              ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
                                              US 2003-739787
     US 2004147543
                            A1
                                   20040729
                                                                          20031218
PRAI US 2002-435889P
                            Р
                                   20021220
     US 2003-516331P
                             Р
                                   20031031
OS
     MARPAT 141:123628
GI
```

$$R_{n}$$
 $R_{1}$ 
 $R_{1}$ 
 $R_{2}$ 
 $R_{1}$ 

AB Title compds. I (R = alkyl, alkoxy, OH, CF3; n = 0, 1; R1, R2 = H, non-interfering substituent; R3 = ArZ, aminosulfonylaryl, aminocarbonylaryl, etc.; Ar = aryl, heteroaryl; Z = bond, alkylene, alkenylene, alkynylene) which are immunomodulators, inducing cytokines biosynthesis, and inhibiting tumor necrosis factors biosynthesis, are prepared For example, 2-butyl-1-isobutyl-7-(thiophen-3-yl)-1H-imidazo[4,5-c]quinolin-4-amine was prepared in a multi-step synthesis starting from 3-bromoaniline, tri-Et orthoformate, and Meldrum's acid. I are useful in the treatment of viral and neoplastic diseases.

#### IT 723284-27-3P 723284-31-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of imidazoquinoline derivs. as immunomodulators for treatment of viral and antineoplastic diseases)

RN 723284-27-3 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-bromo-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 723284-31-9 CAPLUS
CN Methanesulfonamide, N-[4-(4-amino-7-bromo-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

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723265-59-6P 723265-60-9P 723265-62-1P
IT
     723268-70-0P 723268-71-1P 723268-82-4P
     723269-18-9P 723269-85-0P 723272-09-1P
     723272-11-5P 723272-13-7P 723272-16-0P
     723272-18-2P 723272-20-6P 723272-22-8P
     723272-24-0P 723272-26-2P 723272-28-4P
     723272-30-8P 723272-32-0P 723272-34-2P
     723272-36-4P 723272-38-6P 723272-40-0P
     723272-42-2P 723272-44-4P 723272-46-6P
     723272-48-8P 723272-50-2P 723272-52-4P
     723272-54-6P 723272-56-8P 723272-58-0P
     723272-60-4P 723272-62-6P 723272-64-8P
     723272-66-0P 723272-69-3P 723272-73-9P
     723275-52-3P 723275-54-5P 723275-56-7P
     723275-58-9P 723275-60-3P 723275-62-5P
     723275-64-7P 723275-66-9P 723275-68-1P
     723275-70-5P 723275-72-7P 723275-74-9P
     723275-76-1P 723275-78-3P 723275-80-7P
     723275-82-9P 723275-84-1P 723275-86-3P
     723275-88-5P 723275-90-9P 723275-92-1P
     723278-51-1P 723278-54-4P 723278-56-6P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
```

$$\begin{array}{c} O \\ \parallel \\ Me-S-NH-(CH_2) \ 4 \\ \parallel \\ O \\ MeO-CH_2-CH_2 \\ N \\ N \\ NH_2 \end{array} \qquad \begin{array}{c} Ph \\ NH_2 \\ \end{array}$$

RN 723265-60-9 CAPLUS
CN Methanesulfonamide, N-[2-(4-amino-7-phenyl-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 723265-62-1 CAPLUS
CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-phenyl-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 723268-70-0 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(3-pyridinyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 723268-71-1 CAPLUS

CN 1-Propanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(3-pyridinyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 723268-82-4 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-(3-pyridinyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]- (9CI) (CA INDEX NAME)

RN 723269-18-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-7-(3-pyridinyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & & \\$$

RN 723269-85-0 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-butyl-7-[(1E)-2-(3-pyridinyl)ethenyl]-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 723272-09-1 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-phenyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-08-0 CMF C24 H29 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-11-5 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(3-methylphenyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-10-4 CMF C25 H31 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

723272-13-7 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(2-methylphenyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-12-6 CMF C25 H31 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-16-0 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(2-hydroxyphenyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 723272-15-9 CMF C24 H29 N5 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-18-2 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(3-hydroxyphenyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 723272-17-1 CMF C24 H29 N5 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-20-6 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(4-cyanophenyl)-2-(ethoxymethyl)-1H-

imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-19-3 CMF C25 H28 N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-22-8 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(4-ethenylphenyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-21-7 CMF C26 H31 N5 O3 S

$$Me - S - NH - (CH2)4$$

$$CH = CH2$$

$$CH = CH2$$

$$NH2$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-24-0 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(3,5-dimethylphenyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-23-9 CMF C26 H33 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-26-2 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(4-ethylphenyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-25-1 CMF C26 H33 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-28-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-[5-(hydroxymethyl)-3-

pyridinyl]-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 723272-27-3 CMF C24 H30 N6 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-30-8 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-[4-(hydroxymethyl)phenyl]-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 723272-29-5 CMF C25 H31 N5 O4 S

$$\begin{array}{c} O \\ \parallel \\ Me-S-NH-(CH_2)_4 \\ \parallel \\ O \\ EtO-CH_2 \\ N \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-32-0 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(4-methoxyphenyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-31-9 CMF C25 H31 N5 O4 S

$$\begin{array}{c} O \\ \parallel \\ N \end{array}$$

$$\begin{array}{c} \text{OMe} \\ \text{OMe} \\ \text{OMe} \\ \text{N} \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-34-2 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(2-chlorophenyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-33-1

CMF C24 H28 C1 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-36-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(3-chlorophenyl)-2-(ethoxymethyl)-1H-

imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-35-3 CMF C24 H28 C1 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-38-6 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(2,4-difluorophenyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-37-5 CMF C24 H27 F2 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

723272-40-0 CAPLUS

CN Methanesulfonamide, N-[4-[7-(3-acetylphenyl)-4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-39-7 CMF C26 H31 N5 O4 S

CM 2

CRN: 76-05-1 CMF C2 H F3 O2

RN 723272-42-2 CAPLUS

CN Methanesulfonamide, N-[4-[7-(4-acetylphenyl)-4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-41-1 CMF C26 H31 N5 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-44-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(2-ethoxyphenyl)-1H-

imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-43-3 CMF C26 H33 N5 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-46-6 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(3-ethoxyphenyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-45-5 CMF C26 H33 N5 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-48-8 CAPLUS

CN Benzamide, 3-[4-amino-2-(ethoxymethyl)-1-[4-[(methylsulfonyl)amino]butyl]-1H-imidazo[4,5-c]quinolin-7-yl]-N-(2-methylpropyl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-47-7 CMF C29 H38 N6 O4 S

$$\begin{array}{c} O \\ \parallel \\ Me - S - NH - (CH_2) 4 \\ \parallel \\ O \\ EtO - CH_2 \\ N \\ N \\ N \\ NH_2 \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-50-2 CAPLUS

CN Acetamide, N-[2-[4-amino-2-(ethoxymethyl)-1-[4-[(methylsulfonyl)amino]butyl]-1H-imidazo[4,5-c]quinolin-7-yl]phenyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-49-9 CMF C26 H32 N6 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-52-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(2-ethoxy-5-

methylphenyl)-lH-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate
(9CI) (CA INDEX NAME)

CM 1

CRN 723272-51-3 CMF C27 H35 N5 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-54-6 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-[4-(1-methylethoxy)phenyl]-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-53-5 CMF C27 H35 N5 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-56-8 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(2,4-dimethoxyphenyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-55-7 CMF C26 H33 N5 O5 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-58-0 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(2,6-dimethoxyphenyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-57-9 CMF C26 H33 N5 O5 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-60-4 CAPLUS

CN Benzenepropanoic acid, 4-[4-amino-2-(ethoxymethyl)-1-[4-

[(methylsulfonyl)amino]butyl]-1H-imidazo[4,5-c]quinolin-7-yl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-59-1 CMF C27 H33 N5 O5 S

$$\begin{array}{c|c} O \\ \parallel \\ Me-S-NH-(CH_2)_4 \\ \parallel \\ O \\ EtO-CH_2 \\ N \\ NH_2 \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-62-6 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-1-[4-[(methylsulfonyl)amino]butyl]-1H-imidazo[4,5-c]quinolin-7-yl]phenyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-61-5 CMF C25 H32 N6 O5 S2

$$\begin{array}{c|c} O & O & O \\ \parallel & & \\ Me-S-NH-(CH_2)_4 & NH-S-Me \\ \parallel & O & \\ EtO-CH_2 & N & \\ N & NH_2 & \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

723272-64-8 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(ethoxymethyl)-1-[4-[(methylsulfonyl)amino]butyl]-1H-imidazo[4,5-c]quinolin-7-yl]phenyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-63-7 CMF C25 H32 N6 O5 S2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-66-0 CAPLUS

CN Pyrrolidine, 1-[4-[4-amino-2-(ethoxymethyl)-1-[4-[(methylsulfonyl)amino]butyl]-1H-imidazo[4,5-c]quinolin-7-yl]benzoyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-65-9 CMF C29 H36 N6 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-69-3 CAPLUS

CN Benzamide, 4-[4-amino-2-(ethoxymethyl)-1-[4-[(methylsulfonyl)amino]butyl]-

1H-imidazo[4,5-c]quinolin-7-yl]-N-(2-methylpropyl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-68-2 CMF C29 H38 N6 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723272-73-9 CAPLUS

CN Morpholine, 4-[4-[4-amino-2-(ethoxymethyl)-1-[4-[(methylsulfonyl)amino]butyl]-1H-imidazo[4,5-c]quinolin-7-yl]benzoyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723272-72-8 CMF C29 H36 N6 O5 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-52-3 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-7-phenyl-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-51-2 CMF C24 H29 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-54-5 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-propyl-7-(3-pyridinyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-53-4 CMF C23 H28 N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-56-7 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-propyl-7-(4-pyridinyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN .723275-55-6 CMF C23 H28 N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

723275-58-9 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(3-methylphenyl)-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-57-8 CMF C25 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-60-3 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(4-methylphenyl)-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-59-0 CMF C25 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-62-5 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(2-methylphenyl)-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-61-4 CMF C25 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-64-7 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(2-hydroxyphenyl)-2-propyl-1H-

imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 723275-63-6 CMF C24 H29 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-66-9 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(3-cyanophenyl)-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-65-8 CMF C25 H28 N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-68-1 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-[5-(hydroxymethyl)-3-pyridinyl]-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 723275-67-0 CMF C24 H30 N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-70-5 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(4-methoxyphenyl)-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-69-2 CMF C25 H31 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-72-7 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(2-chlorophenyl)-2-propyl-1H-

imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-71-6 CMF C24 H28 C1 N5 O2 S

CM 2.

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-74-9 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(3-chlorophenyl)-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-73-8

CMF C24 H28 C1 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-76-1 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-(4-chlorophenyl)-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-75-0 CMF C24 H28 C1 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-78-3 CAPLUS

CN Benzamide, 3-[4-amino-1-[4-[(methylsulfonyl)amino]butyl]-2-propyl-1H-imidazo[4,5-c]quinolin-7-yl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-77-2 CMF C25 H30 N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-80-7 CAPLUS

CN Benzamide, 3-[4-amino-1-[4-[(methylsulfonyl)amino]butyl]-2-propyl-1H-imidazo[4,5-c]quinolin-7-yl]-N-(2-methylpropyl)-, trifluoroacetate (9CI)

(CA INDEX NAME)

CM 1

CRN 723275-79-4 CMF C29 H38 N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-82-9 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-[4-(1-methylethoxy)phenyl]-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-81-8 CMF C27 H35 N5 O3 S

CRN 76-05-1 CMF C2 H F3 O2

RN

723275-84-1 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-[3-(aminomethyl)phenyl]-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-83-0 CMF C25 H32 N6 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-86-3 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-7-[4-(methylsulfonyl)phenyl]-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-85-2

CMF C25 H31 N5 O4 S2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-88-5 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-1-[4-[(methylsulfonyl)amino]butyl]-2-

propyl-1H-imidazo[4,5-c]quinolin-7-yl]phenyl]-, trifluoroacetate (9CI)
(CA INDEX NAME)

CM 1

CRN 723275-87-4 CMF C25 H32 N6 O4 S2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723275-90-9 CAPLUS

CN Pyrrolidine, 1-[4-[4-amino-1-[4-[(methylsulfonyl)amino]butyl]-2-propyl-1H-imidazo[4,5-c]quinolin-7-yl]benzoyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-89-6 CMF C29 H36 N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

723275-92-1 CAPLUS

CN Benzamide, 4-[4-amino-1-[4-[(methylsulfonyl)amino]butyl]-2-propyl-1H-imidazo[4,5-c]quinolin-7-yl]-N-(2-methylpropyl)-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723275-91-0 CMF C29 H38 N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723278-51-1 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(3-pyridinyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723268-70-0 CMF C23 H28 N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723278-54-4 CAPLUS

CN Ethanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(3-pyridinyl)-1H-

imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723278-53-3 CMF C24 H30 N6 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 723278-56-6 CAPLUS

CN 2-Propanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-7-(3-pyridinyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, trifluoroacetate (9CI) (CA INDEX NAME)

CM 1

CRN 723278-55-5 CMF C25 H32 N6 O3 S

CRN 76-05-1 CMF C2 H F3 O2

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ANSWER 17 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
L6
ΑN
     2004:515768 CAPLUS
DN
     141:66260
ΤI
    Non-NF\kappaB reporter assay for screening effectors (immune response
    modifiers) of Toll-like receptor activity using TLR-inducible promoters
     Gupta, Shalley K.; Ghosh, Tarun K.; Fink, Jason R.
IN
     3M Innovative Properties Company, USA
PA
SO
     PCT Int. Appl., 78 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
                                            APPLICATION NO.
                         KIND
                                DATE
                                                                   DATE
     PATENT NO.
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                                _____
                                20040624
                                            WO 2003-US34554
                                                                   20031031
     WO 2004053452
                         A2
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
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TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW

A1

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,

20040708 US 2003-732563

20031210

US 2004132079

PRAI US 2002-432650P P 20021211

The present invention provides assays for detecting agonists of Toll-like receptors. The assays may be useful for detecting a broader range of TLR activation than is possible by monitoring NF-κB activation, and may be used to screen for effectors that do not activate an NF-κB-dependent pathway. The assays of the present invention also may provide a more relevant indication of the quant. character of a particular cellular response to TLR activation by a particular TLR agonist. The assays include providing a cell culture transfected with a nucleic acid sequence that encodes a reporter operably linked to a TLR-inducible expression control sequence. The assays of the present invention employ a recombinant cell line capable of inducing gene expression from an promoter of a gene that encodes an immune system compound (e.g., IFN-a) in response to TLR activation. The system using a Namalwa cell line as expression host and IFN-al promoter was demonstrated.

IT 313355-91-8

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(IRM, as effector of Toll-like receptor; non-NFkB reporter assay for screening effectors (immune response modifiers) of Toll-like receptor activity using TLR-inducible promoters)

RN 313355-91-8 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:515636 CAPLUS

DN 141:48572

TI Reporter gene systems to screen for effectors of Toll-like receptors

IN Gupta, Shalley K.; Ghosh, Tarun K.; Fink, Jason R.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 69 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE				
					<del>-</del>				
ΡI	WO 2004053057	A2	20040624	WO 2003-US34563	20031031				
	WO 2004053057	A3	20041028						

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2004197865 A1 20041007 US 2003-732796 PRAI US 2002-432651P Ρ 20021211 Reporter gene systems that can be used to screen for modulators of Toll-like receptors are described. These systems include an expression cassette for the Toll-like receptor gene and a second cassette for a reporter gene under control of the Toll-like receptor, e.g. from a gene for a cytokine, chemokine, a co-stimulatory mol. or a defensin. The method may be used to screen for effectors that do not activate an NF-κB-dependent pathway. The system uses an animal cell line, preferably a Namalwa cell, as expression host. 313355-91-8 IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (as effector of Toll-like receptor; reporter gene systems to screen for effectors of Toll-like receptors) 313355-91-8 CAPLUS RNMethanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-CN yl)butyl]- (9CI) (CA INDEX NAME)

ANSWER 19 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN L6 ΑN 2004:33981 CAPLUS 140:94043 DN Preparation of imidazoquinolinesulfonamides as inducers of cytokine ΤI biosynthesis. IN Griesgraber, George W. 3M Innovative Properties Company, USA PA U.S., 86 pp., Cont. of U.S. Ser. No. 27,273, abandoned. SO CODEN: USXXAM DTPatent LA English FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 6677349	В1	20040113	US 2003-425054	20030428
	US 2004106638	A1	20040603	US 2003-669051	20030923
	US 2004132762	A1	20040708	US 2003-734306	20031212
	US 6888000	B2	20050503		
PRAI	US 2001-27273	B1	20011221		
	US 2003-425054	A1	20030428		
	US 2003-669051	A1	20030923		
os	MARPAT 140:94043				•
GI					

$$R_n$$
 $NH_2$ 
 $NH_2$ 
 $N$ 
 $R_1$ 

Title compds. [I; R1 = alkyl-NR3SO2XR4, alkenyl-NR3SO2XR4; X = bond, R5; AΒ R4 = (substituted) aryl, heteroaryl, heterocyclyl, alkyl, alkenyl; R2 = H, (substituted) alkyl, alkenyl, aryl, heteroaryl, alkyl-O-alkyl, alkyl-O-alkenyl; R3 = H, alkyl; R5 = H, alkyl; R4R5 = atoms to form a 3-7 membered (substituted) heterocyclyl; n = 0-4; R = alkyl, alkoxy, halo, CF3], were prepared Thus, a stirred solution of 4-chloro-3-nitroquinoline in CH2Cl2 was treated with Et3N and 1,2-diamino-2-methylpropane to give 2-methyl-N1-(3-nitroquinolin-4-yl)propane-1,2-diamine. A solution of the latter in THF was cooled to 0 $^{\circ}$  and treated with a 1 N NaOH solution of di-tert-Bu dicarbonate under rapid stirring followed by warming to ambient temperature and stirring overnight; addnl. di-tert-Bu dicarbonate was added and stirring was continued for 3 d. to give tert-Bu 1,1-dimethy1-2-[(3nitroquinolin-4-yl)amino]ethylcarbamate. This in PhMe was treated with Pt/C and shaken under H2 for 6 h to give tert-Bu 2-(3-aminoquinolin-4-yl)-1,1-dimethylethylcarbamate. The aminoquinoline in CH2Cl2 was cooled to 0° and treated with Et3N and ethoxyacetyl chloride to give a syrup which was refluxed overnight with Et3N in EtOH to give tert-Bu 2-[2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1dimethylethylcarbamate. The imidazoquinoline in CH2Cl2 was treated with 3-chloroperoxybenzoic acid and stirred 2 h to give tert-Bu 2-[2-(ethoxymethyl)-5-oxido-1H-imidazo[4,5-c]quinolin-1-yl]-1,1dimethylethylcarbamate. The latter in 1,2-dichloroethane was heated to 70° and treated with concentrated NH4OH; p-toluenesulfonyl chloride was added and the reaction mixture was heated in a sealed tube for 2 h to give tert-Bu 2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1dimethylethylcarbamate . This was refluxed in EtOH containing HCl for 2 h to give 1-(2-amino-2-methylpropyl)-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-4-amine. 1-(2-Amino-2-methylpropyl)-2-(ethoxymethyl)-1H-imidazo[4,5c]quinolin-4-amine in CH2Cl2 at 0° was treated with Et3N and MeSO2Cl and the reaction was allowed to warm to ambient temperature overnight

give N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-

to

```
in an in vitro human blood cell system at lowest effective concns. of
     0.0001-10 μM.
IT
     313355-89-4P 313355-91-8P 313355-97-4P
     313355-98-5P 313356-01-3P 313356-03-5P
     313356-05-7P 313356-25-1P 313356-27-3P
    ·313356-36-4P 313356-37-5P 313356-39-7P
     313356-40-0P 313356-44-4P 313356-63-7P
     313356-65-9P 313356-67-1P 313356-71-7P
     313356-72-8P 313356-74-0P 313356-76-2P
     313356-98-8P 313357-00-5P 313357-09-4P
     313357-11-8P 313357-13-0P 313357-15-2P
     313357-29-8P 313357-43-6P 313357-84-5P
     313357-85-6P 313357-90-3P 313357-95-8P
     313357-97-0P 313357-99-2P 313358-02-0P
     313358-51-9P 313359-06-7P 313359-52-3P
     313359-79-4P 313359-81-8P 313359-85-2P
     313359-89-6P 313359-91-0P 313359-93-2P
     313359-97-6P 532959-63-0P 534568-90-6P
     642473-06-1P 642473-21-0P 642473-23-2P
     642473-39-0P 642473-41-4P 642473-42-5P
     642473-44-7P 642473-49-2P 642473-53-8P
     642473-54-9P 642473-56-1P 642473-57-2P
     642473-58-3P 642473-59-4P 642473-62-9P
     642473-63-0P 642473-65-2P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of imidazoquinolinesulfonamides as inducers of cytokine
        biosynthesis)
RN
     313355-89-4 CAPLUS
     Benzenemethanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-
CN
                        (CA INDEX NAME)
     1-yl)butyl]-(9CI)
```

dimethylethyl]methanesulfonamide (claimed compound). I induced interferon

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RN 313355-91-8 CAPLUS
CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)
```

RN 313355-97-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-[(4-methoxyphenyl)methyl]-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

MeO 
$$CH_2$$
  $N$   $N$   $N$   $N$   $N$ 

RN 313355-98-5 CAPLUS

CN 1-Butanesulfonamide, N-[4-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butyl](9CI) (CA INDEX NAME)

RN 313356-01-3 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-phenyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313356-03-5 CAPLUS

CN 1-Propanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-02-4 CMF C19 H27 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-05-7 CAPLUS

CN 1-Octanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CRN 313356-04-6 CMF C24 H37 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-25-1 CAPLUS

CN Benzenemethanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-24-0 CMF C23 H27 N5 O2 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-27-3 CAPLUS

CN Ethenesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-2-phenyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-26-2 CMF C24 H27 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-36-4 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 313356-37-5 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-36-4 CMF C17 H23 N5 O2 S

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{Me-S-NH-CH}_2\text{-CH}_2 \\ \parallel \\ \text{O} \quad \text{n-Bu} \\ \parallel \\ \text{N} \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-39-7 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-1,1,1-trifluoro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-38-6 CMF C17 H20 F3 N5 O2 S

CM · 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-40-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313355-91-8 CMF C19 H27 N5 O2 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-44-4 CAPLUS

CN 2-Propanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-43-3 CMF C21 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-63-7 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313355-89-4 CMF C25 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-65-9 CAPLUS

CN Ethenesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-2-phenyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-64-8 CMF C26 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-67-1 CAPLUS

CN 1-Propanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-66-0 CMF C21 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-71-7 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-1,1,1-trifluoro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-70-6

CMF C19 H24 F3 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-72-8 CAPLUS

CN 1-Propanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313356-74-0 CAPLUS

CN 2-Propanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313356-76-2 CAPLUS

CN 1-Octanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313356-98-8 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN . 313357-00-5 CAPLUS

CN Ethenesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-2-phenyl- (9CI) (CA INDEX NAME)

RN 313357-09-4 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-08-3 CMF C15 H23 N5 O2 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-11-8 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-7,7-dimethyl-2-oxo-, (1S,4R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-10-7 CMF C28 H39 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-13-0 CAPLUS

CN 1-Butanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-12-9 CMF C22 H33 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-15-2 CAPLUS

CN 1-Hexadecanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-14-1 CMF C34 H57 N5 O2 S

Me- (CH<sub>2</sub>)<sub>15</sub>-s-NH- (CH<sub>2</sub>)<sub>4</sub>

$$0$$
 $n$ -Bu
 $N$ 
 $N$ 
 $N$ 

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-29-8 CAPLUS

CN 1-Propanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-3-chloro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-28-7 CMF C21 H30 C1 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-43-6 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-7,7-dimethyl-2-oxo-, (1R,4S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-42-5 CMF C28 H39 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-84-5 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 313357-85-6 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-84-5 CMF C18 H25 N5 O3 S

CM 2

CRN 76-05-1

CMF C2 H F3 O2

RN 313357-90-3 CAPLUS

CN Benzenemethanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-89-0 CMF C24 H29 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-95-8 CAPLUS

CN Ethanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-94-7 CMF C19 H27 N5 O3 S

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & &$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-97-0 CAPLUS

CN 1-Propanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-96-9 CMF C20 H29 N5 O3 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-99-2 CAPLUS

CN 1-Butanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-98-1 CMF C21 H31 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313358-02-0 CAPLUS

CN 1-Propanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-3-chloro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313358-01-9

CMF C20 H28 C1 N5 O3 S

CM 2

CRN 76-05-1

CMF C2 H F3 O2

RN 313358-51-9 CAPLUS

CN Benzenemethanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-lH-imidazo[4,5-c]quinolin-1-yl]butyl]-2-nitro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313358-50-8 CMF C24 H28 N6 O5 S

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-06-7 CAPLUS

CN 1-Octanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-05-6 CMF C25 H39 N5 O3 S

CM 2 .

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-52-3 CAPLUS

CN 1-Dodecanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-51-2 CMF C29 H47 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-79-4 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313359-81-8 CAPLUS

CN 2-Propanesulfonamide, N-[4-(4-amino-2-butyl-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313359-85-2 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-2-butyl-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313359-89-6 CAPLUS

CN Ethanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ Et-S-NH-(CH_2)_4 \\ \parallel \\ O \\ MeO-CH_2-CH_2 \\ N \\ N \\ NH_2 \\ \end{array}$$

RN 313359-91-0 CAPLUS

CN 1-Propanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 313359-93-2 CAPLUS

CN 1-Butanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 313359-97-6 CAPLUS

CN Benzenemethanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 532959-63-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 534568-90-6 CAPLUS

CN Methanesulfonamide, N-[3-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)propyl]- (9CI) (CA INDEX NAME)

RN 642473-06-1 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 642473-05-0 CMF C18 H25 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 642473-21-0 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-2-oxo-, (1R,4R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 642473-20-9 CMF C25 H33 N5 O4 S

$$\begin{array}{c|c} CH_2 \\ O = S = O \\ NH \\ (CH_2) 4 \\ N \\ NH_2 \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 642473-23-2 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-2-oxo-, (1S,4S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 642473-22-1

CMF C25 H37 N5 O4 S

$$\begin{array}{c} \text{CH2} \\ \text{O} = \text{S} = \text{O} \\ \text{NH} \\ \text{(CH2) 4} \\ \text{MeO-CH2-CH2} \\ \text{N} \\ \text{NH2} \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 642473-39-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-propyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-41-4 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-42-5 CAPLUS

CN Methanesulfonamide, N-[3-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)propyl]- (9CI) (CA INDEX NAME)

RN 642473-44-7 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-hexyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-(9CI) (CA INDEX NAME)

RN 642473-49-2 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-pentyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-53-8 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-54-9 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-2,2-dimethylpropyl]- (9CI) (CA INDEX NAME)

RN 642473-56-1 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-57-2 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(ethoxymethyl)-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-58-3 CAPLUS

CN Methanesulfonamide, N-[3-[4-amino-2-(3-phenoxypropyl)-1H-imidazo[4,5-

c]quinolin-1-yl]propyl]- (9CI) (CA INDEX NAME)

RN 642473-59-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(3-phenoxypropyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 642473-62-9 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]-1,1-dimethylethyl]- (9CI) (CA INDEX NAME)

RN 642473-63-0 CAPLUS

CN Ethanesulfonamide, N-[4-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 642473-65-2 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(cyclopropylmethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

IT 642473-24-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of imidazoquinolinesulfonamides as inducers of cytokine biosynthesis)

RN 642473-24-3 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313360-31-5 CMF C18 H29 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RE.CNT 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:434369 CAPLUS

DN 139:26620

TI Topical pharmaceuticals comprising an immune response modifier

IN Skwierczynski, Raymond D.; Busch, Terri F.; Gust-Heiting, Amy L.; Fretland, Mary T.; Scholz, Matthew T.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 123 pp. CODEN: PIXXD2

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DT Patent
LA English
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FAN.CNT 1																				
	PATENT NO.					KIND		DATE			APPL	ICAT:	DATE							
ΡI	WO	2003045391								,	 WO 2	002-	US38		20021127					
		W: AE, AG, AI		AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,			
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
			•		•	-						KG,								
												MW,								
			•	•	•		•			•	•	SK,	-			•	•			
			•	•	•		•	VN,				-	,	,	,	,				
		RW:	•	•	•	•	•				•		UG.	ZM.	ZW.	AM.	AZ.	BY,		
			•			•			-		•	•						ES,		
				-	-							PT,								
			•	•	•	•				•						<i>J.</i> ,	20,	02,		
								ML, MR, NE, SN, TD, TO CA 2002-2467828						20021127						
											US 2002-306019									
									40901 EP 2002-798470											
	EP	R: AT, BE, CH																		
		R:			-	-											MC,	Е1,		
		0005	-							CY, AL,: TR, BG, CZ, EE, JP 2003-546893										
										JP Z	003-		21	JUZI.	121					
PRAI		US 2001-340605P																		
	US 2002-378452P																			
		WO 2002-US38190 W 20																		
os	MARPAT 139:26620																			
GI																				

$$(R^1)_n \xrightarrow{NH_2} N \xrightarrow{R^{21}}$$

AB Pharmaceutical formulations comprise an immune response modifier (IRM) chosen from imidazoquinoline amines, imidazotetrahydroquinoline amines, imidazopyridine amines, and other heterocyclic fused ring derivs.; a fatty acid; and a hydrophobic, aprotic component miscible with the fatty acid are useful for the treatment of dermal associated conditions. Topical formulations containing, e.g., I are provided. In one embodiment, the topical formulations are advantageous for treatment of actinic keratosis, postsurgical scars, basal cell carcinoma, atopic dermatitis, and warts.

IT 534568-83-7 534568-90-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (topical pharmaceuticals comprising an immune response modifier)

RN 534568-83-7 CAPLUS

CN Ethanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]- (9CI) (CA INDEX NAME)

Ι

RN 534568-90-6 CAPLUS

CN Methanesulfonamide, N-[3-(4-amino-2-methyl-1H-imidazo[4,5-c]quinolin-1-yl)propyl]- (9CI) (CA INDEX NAME)

# RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:417574 CAPLUS

DN 139:929

TI Toll-like receptor (TLR) pathway-based methods for identification of immune response modifier (IRM) compounds, and methods of use of such compounds

IN Gorden, Keith B.; Qiu, Xiaohong; Tomai, Mark A.; Vasilakos, John P.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 66 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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	PAT	CENT	NO.	KIN	D	DATE			APPLICATION NO.						DATE					
PI	WO 2003043572					A2		20030530		1	WO 2002-US36758						20021114			
	WO 2003043572				A3		20030724													
		W:	ΑE,	AG,	ΑL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
			GM.	HR.	HU.	ID.	IL.	IN.	IS.	JP.	KE,	KG,	KP.	KR,	KZ,	LC,	LK,	LR,		

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20040122 US 2002-294935 US 2004014779 A1 20021114 -EP 2002-780689 EP 1455700 A2 20040915 20021114 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK Т2 20050512 JP 2003-545253 20021114 JP 2005513021 20011116 PRAI US 2001-332412P Р WO 2002-US36758 W 20021114

AB Methods for identifying a compound that activates a TLR-mediated cellular signaling pathway is disclosed. The method includes (a) exposing a TLR-pos. cell culture to a test compound and measuring a TLR-mediated cellular response; (b) exposing a TLR-neg. cell culture to a test compound and measuring a TLR-mediated cellular response; and (c) identifying the test compound as an IRM if the cellular response in the TLR-pos. cell culture is greater than the cellular response of the TLR-neg. cell culture. Methods of eliciting a TLR-mediated cellular response are also disclosed. Such methods include administration of an IRM compound to an IRM-responsive cell so that the IRM compds. affects at least one TLR-mediate cellular signaling pathway.

IT 313355-91-8 313356-36-4 532959-63-0

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(toll-like receptor pathway-based methods for identification of immune response modifier compds., and methods of use of such compds.)

RN 313355-91-8 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313356-36-4 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{Me-S-NH-CH}_2\text{-CH}_2 \\ \parallel \\ \text{O} \quad \text{n-Bu} \\ \parallel \\ \text{N} \\ \end{array}$$

RN 532959-63-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-ethyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

L6 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:449990 CAPLUS

DN 137:28292

TI Screening method for identifying compounds that selectively induce interferon alpha

IN Tomai, Mark A.; Vasilakos, John P.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 22 pp.

CODEN: PIXXD2
DT Patent

LA English

FAN.CNT 1

DATE PATENT NO. KIND DATE APPLICATION NO. \_\_\_\_\_\_ WO 2001-US46698 20011206 PΙ WO 2002046749 A2 20020613 A3 20030828 WO 2002046749 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,

GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20020613 CA 2001-2430206 20011206 AACA 2430206 AU 2002-32498 20011206 AU 2002032498 Α5 20020618 US 2001-13193 20011206 US 2002110840 Α1 20020815 EP 2001-992019 20011206 EP 1360486 A2 20031112 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR 20050106 JP 2002-548435 20011206 JP 2005500510 Т2 PRAI US 2000-254229P Ρ 20001208 WO 2001-US46698 W 20011206 GΙ

$$NH_2$$
 $N - (CH_2) 4NHCO$ 
 $N - CH_2NHCH_2$ 
 $N - CH_2NHCH_2$ 

Methods for screening for compds. that selectively induce IFN- $\alpha$  production and methods for ameliorating conditions in a patient using a small mol. that selectively induces the production of IFN- $\alpha$  are disclosed. Cytokine expression was determined in various cell types (PBMC, CD14+ cells, pDC2-enriched cells, and DC11c+ blood DC) stimulated with nonselective compound resiguimed or with selective compound I.

I

313355-91-8
RL: BUU (Biological use, unclassified); PAC (Pharmacological activity);
THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (screening method for identifying compds. that selectively induce interferon alpha)
313355-91-8 CAPLUS

RN 313355-91-8 CAPLUS
CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

ΙT

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ANSWER 23 OF 23 CAPLUS COPYRIGHT 2005 ACS on STN
Ь6
ΑN
     2000:900462 CAPLUS
     134:56667
DN
     Preparation of sulfonamide and sulfamide substituted imidazoquinolines as
     immune response modifiers
     Crooks, Stephen L.; Lindstrom, Kyle J.; Merrill, Bryon A.; Rice, Michael
TN
     3M Innovative Properties Company, USA
PΑ
     PCT Int. Appl., 111 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΆ
FAN.CNT 7
     PATENT NO.
                         KIND
                                DATE
                                             APPLICATION NO.
                                                                    DATE
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                                                                    _____
                                                                    20000608
     WO 2000076519
                          A1
                                20001221
                                             WO 2000-US15722
PΙ
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             CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB,
             GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR,
             TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
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             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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     US 6331539
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                                20011218
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     BR 2000011433
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                                             BR 2000-11433
                                                                     20000608
                          Α
                                20020424
                                             EP 2000-938211
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     EP 1198233
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             IE, SI, LT, LV, FI, RO, MK, CY, AL
     TR 200103575
                          Т2
                                 20020621
                                             TR 2001-200103575
                                                                     20000608
                                             JP 2001-502852
     JP 2003501474
                          Т2
                                 20030114
                                                                     20000608
     EE 200100669
                          Α
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                                 20031031
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     AU 772179
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                                             EP 2004-4588
                          Α1
                                                                    20000608
     EP 1438958
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, CY
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                                20050327
                                             RU 2001-132139
                                                                     20000608
     RU 2248975
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     NO 2001005502
                          Α
                                 20020207
                                                                    20011109
                                             ZA 2001-9854
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                                             US 2004-826836
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     US 2004204438
                          A1
                                 20041014
PRAI US 1999-138365P
                          Ρ
                                 19990610
     US 2000-589216
                          Α
                                 20000607
                                 20000607
     US 2000-589236
                          Α
     EP 2000-938205
                          A3
                                 20000608
     WO 2000-US15722
                          W
                                 20000608
     US 2001-166321
                          Α1
                                 20010615
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US 2001-27272 A1 20011221

OS MARPAT 134:56667

GΙ

$$NH2$$
 $NH2$ 
 $NH3$ 
 $NH4$ 
 $NH5$ 
 $NH5$ 
 $NH5$ 
 $NH6$ 
 $NH6$ 

AB The title compds. [I; R1 = alkylNR3SO2XR4, alkenylNR3SO2XR4 (wherein X = a bond, NR5; R3 = H, alkyl; R4 = (un)substituted aryl, heteroaryl, alkyl, etc.; R5 = H, alkyl; R4 and R5 can combine to form 3-7 membered (un)substituted heterocyclic ring); R2 = H, alkyl, aryl, etc.; R = alkyl, alkoxy, halo, CF3; n = 0-4], useful as immune response modifiers, were prepared Thus, reacting 5-dimethylamino-1-naphthalenesulfonyl chloride with 1-(4-aminobutyl)-2-butyl-1H-imidazo[4,5-c]quinolin-4-amine in the presence of N,N-diisopropylethylamine in CH2C12 afforded the naphthalenesulfonamide II which induced interferon α and TNFα biosynthesis in human cells at 0.12 μM and 3.33 μM, resp. The compds. I can induce the biosynthesis of various cytokines such as interferon α and TNFα (data given), and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

ΙT 313355-89-4P 313355-91-8P 313355-97-4P 313355-98-5P 313356-01-3P 313356-03-5P 313356-05-7P 313356-25-1P 313356-27-3P 313356-37-5P 313356-39-7P 313356-40-0P 313356-44-4P 313356-63-7P 313356-65-9P 313356-67-1P 313356-71-7P 313356-73-9P 313356-75-1P 313356-77-3P 313356-99-9P 313357-01-6P 313357-09-4P 313357-11-8P 313357-13-0P 313357-15-2P 313357-29-8P 313357-43-6P 313357-78-7P 313357-79-8P 313357-84-5P 313357-85-6P 313357-89-0P 313357-90-3P 313357-95-8P 313357-97-0P 313357-99-2P 313358-02-0P 313358-51-9P 313358-74-6P 313359-06-7P 313359-52-3P 313359-76-1P 313359-79-4P 313359-80-7P 313359-82-9P 313359-86-3P 313359-90-9P 313359-92-1P 313359-94-3P 313359-98-7P 313360-00-8P 313360-31-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonamide and sulfamide substituted imidazoquinolines as immune response modifiers)

RN 313355-89-4 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313355-91-8 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313355-97-4 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-[(4-methoxyphenyl)methyl]-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 313355-98-5 CAPLUS

CN 1-Butanesulfonamide, N-[4-(4-amino-1H-imidazo[4,5-c]quinolin-1-yl)butyl](9CI) (CA INDEX NAME)

RN 313356-01-3 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-phenyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313356-03-5 CAPLUS

CN 1-Propanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1 .

CRN 313356-02-4 CMF C19 H27 N5 O2 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-05-7 CAPLUS

CN 1-Octanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-04-6 CMF C24 H37 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-25-1 CAPLUS

CN Benzenemethanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CRN 313356-24-0 CMF C23 H27 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-27-3 CAPLUS

CN Ethenesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-2-phenyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-26-2 CMF C24 H27 N5 O2 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-37-5 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-36-4 CMF C17 H23 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-39-7 CAPLUS

CN Methanesulfonamide, N-[2-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)ethyl]-1,1,1-trifluoro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CRN 313356-38-6 CMF C17 H20 F3 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-40-0 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313355-91-8 CMF C19 H27 N5 O2 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-44-4 CAPLUS

CN 2-Propanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-43-3 CMF C21 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-63-7 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313355-89-4 CMF C25 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-65-9 CAPLUS

CN Ethenesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-2-phenyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-64-8 CMF C26 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-67-1 CAPLUS

CN 1-Propanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-66-0 CMF C21 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-71-7 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-1,1,1-trifluoro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-70-6

CMF C19 H24 F3 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-73-9 CAPLUS

CN 1-Propanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CRN 313356-72-8 CMF C17 H27 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-75-1 CAPLUS

CN 2-Propanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-74-0 CMF C17 H27 N5 O2 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-77-3 CAPLUS

CN 1-Octanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-76-2 CMF C22 H37 N5 O2 S

Me- (CH<sub>2</sub>) 7-S-NH- (CH<sub>2</sub>) 4
$$N$$
 $N$ 
 $N$ 
 $N$ 
 $N$ 

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313356-99-9 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-

c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313356-98-8 CMF C21 H27 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-01-6 CAPLUS

CN Ethenesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-2-phenyl-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-00-5 CMF C22 H27 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-09-4 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-08-3 CMF C15 H23 N5 O2 S

CM 2

CRN 76-05-1

CMF C2 H F3 O2

CN

RN 313357-11-8 CAPLUS

 $\label{lem:bicyclo} \text{Bicyclo[2.2.1]} \\ \text{heptane-1-methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-7,7-dimethyl-2-oxo-, (1S,4R)-, \\ \text{mono(trifluoroacetate)} \ (9\text{CI)} \ \ (\text{CA INDEX NAME})$ 

· CM

CRN 313357-10-7 CMF C28 H39 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-13-0 CAPLUS

CN 1-Butanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-12-9 CMF C22 H33 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-15-2 CAPLUS

CN 1-Hexadecanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-14-1 CMF C34 H57 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-29-8 CAPLUS

CN 1-Propanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-3-chloro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-28-7

CMF C21 H30 C1 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-43-6 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[4-(4-amino-2-butyl-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-7,7-dimethyl-2-oxo-, (1R,4S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-42-5 CMF C28 H39 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-78-7 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ \parallel & \\ NH-CH_2-CH_2 \\ \parallel & \\ O & EtO-CH_2 \\ \parallel & \\ N & \\ NH_2 \end{array}$$

RN 313357-79-8 CAPLUS

CN Methanesulfonamide, N-[2-[4-amino-2-(ethoxymethyl)-1H-imidazo[4,5-c]quinolin-1-yl]ethyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-78-7 CMF C16 H21 N5 O3 S

$$\begin{array}{c|c} O & \\ \parallel & \\ NH-CH_2-CH_2 \\ \parallel & \\ O & EtO-CH_2 \\ \parallel & \\ N & \\ NH_2 \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-84-5 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 313357-85-6 CAPLUS

CN Methanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-84-5 CMF C18 H25 N5 O3 S

$$Me - S - NH - (CH2) 4$$

$$0$$

$$MeO - CH2 - CH2
$$N$$

$$NH2$$$$

CM 2

CRN 76-05-1

CMF C2 H F3 O2

RN 313357-89-0 CAPLUS

CN Benzenemethanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RN 313357-90-3 CAPLUS

CN Benzenemethanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-89-0 CMF C24 H29 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-95-8 CAPLUS

CN Ethanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-94-7 CMF C19 H27 N5 O3 S

$$\begin{array}{c|c} O \\ \parallel \\ Et-S-NH-(CH_2)_4 \\ \parallel \\ O \\ MeO-CH_2-CH_2 \\ N \\ NH_2 \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-97-0 CAPLUS

CN: 1-Propanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CRN 313357-96-9 CMF C20 H29 N5 O3 S

$$\begin{array}{c|c} O \\ \parallel \\ n\text{-Pr-S-NH-} (CH_2) \text{ 4} \\ \parallel \\ O \\ \text{MeO-CH}_2\text{-CH}_2 \\ N \\ N \\ NH_2 \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313357-99-2 CAPLUS

CN 1-Butanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313357-98-1 CMF C21 H31 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313358-02-0 CAPLUS

CN 1-Propanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-3-chloro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313358-01-9 CMF C20 H28 C1 N5 O3 S

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10826836
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CRN 76-05-1 CMF C2 H F3 O2

RN 313358-51-9 CAPLUS

CN Benzenemethanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-2-nitro-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313358-50-8 CMF C24 H28 N6 O5 S

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ &$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313358-74-6 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-7,7-dimethyl-2-oxo-, (1S,4R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313358-73-5 CMF C27 H37 N5 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-06-7 CAPLUS

CN 1-Octanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-lH-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-05-6 CMF C25 H39 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-52-3 CAPLUS

CN 1-Dodecanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-51-2 CMF C29 H47 N5 O3 S

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{11} - \text{S-NH-} (\text{CH}_2)_4 \\ \parallel \\ \text{O} \\ \text{MeO-} \text{CH}_2 - \text{CH}_2 \\ \text{N} \\ \text{NH}_2 \end{array}$$

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-76-1 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[4-[4-amino-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-7,7-dimethyl-2-oxo-, (1R,4S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-75-0 CMF C27 H37 N5 O4 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-79-4 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]- (9CI) (CA INDEX NAME)

RN 313359-80-7 CAPLUS

CN Methanesulfonamide, N-[4-(4-amino-2-butyl-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-79-4 CMF C19 H31 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-82-9 CAPLUS

CN 2-Propanesulfonamide, N-[4-(4-amino-2-butyl-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-81-8 CMF C21 H35 N5 O2 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-86-3 CAPLUS

CN Benzenemethanesulfonamide, N-[4-(4-amino-2-butyl-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-1-yl)butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-85-2 CMF C25 H35 N5 O2 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-90-9 CAPLUS

CN Ethanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-89-6 CMF C19 H31 N5 O3 S

$$\begin{array}{c|c} & \circ & \\ & \parallel & \\ \text{Et-S-NH- (CH_2) 4} \\ & \parallel & \\ & \circ & \\ \text{MeO-CH_2-CH_2} \\ & N \\ & & N \\ \end{array}$$

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-92-1 CAPLUS

CN 1-Propanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-

1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-91-0 CMF C20 H33 N5 O3 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-94-3 CAPLUS

CN 1-Butanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-93-2 CMF C21 H35 N5 O3 S

CRN 76-05-1 CMF C2 H F3 O2

RN 313359-98-7 CAPLUS

CN Benzenemethanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 313359-97-6 CMF C24 H33 N5 O3 S

CRN 76-05-1 CMF C2 H F3 .02

RN 313360-00-8 CAPLUS

CN Bicyclo[2.2.1]heptane-1-methanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]-7,7-dimethyl-2-oxo-, (1S,4R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

- CM 1

CRN 313359-99-8 CMF C27 H41 N5 O4 S

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 313360-31-5 CAPLUS
CN Methanesulfonamide, N-[4-[4-amino-6,7,8,9-tetrahydro-2-(2-methoxyethyl)-1H-imidazo[4,5-c]quinolin-1-yl]butyl]- (9CI) (CA INDEX NAME)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT